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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
LAIR, DONALD M

ART UNIT	PAPER NUMBER
2858	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/024,897	Applicant(s) MC PHERSON ET AL.	
	Examin r Donald M Lair	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sh et with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 5, 7, 8, 11, 12, 13, 15, 20, 22 – 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Manome et al (US-4,608,657).

4. In regards to Claims 1 – 5 and 20, Manome et al. disclose a method for testing probe calibration comprising storing at least one operation parameter of an input channel in communication with a probe (Column 7, lines 59 – 64; Fig. 10A), determining if a calibration signal communicated by the probe exhibits a characteristic indicative of inappropriate probe operation (Column 2, lines 17 – 19), adapting at least one calibration parameter, including a probe compensation parameter (variable capacitance), in response to determination of inappropriate probe operation (Column 5, lines 31 – 35), and retrieving the operational parameter of the input channel after determination that the inappropriate probe characteristic has been reduced to a threshold level (Column 7, lines 59 – 64). Further, Manome et al. teach initiating a calibration sequence in response to an indicium of a user request to calibrate (Column 5, lines 31 – 35), and displaying a user message indicative of a completed calibration (Fig. 6, element 118).

5. In regards to Claim 7, Manome et al. teach the method described above, wherein the calibration parameter comprises at least one parameter of the input channel (Column 7, lines 59 – 64), and wherein the operational parameter tends to offset the characteristic indicative of inappropriate probe operation (Column 5, lines 31 – 35).

6. In regards to Claim 8, Manome et al. teach the method described above, wherein the calibration signal is displayed on a display device, using the display device to determine an inappropriate probe operation (Column 2, lines 48 – 53)

7. In regards to Claim 11, Manome et al. teach the method described above, wherein the step of determining comprises comparing the calibration signal to a reference calibration signal, wherein an unfavorable comparison is indicative of inappropriate probe operation (Column 2, lines 8 – 19).

8. In regards to Claim 12, Manome et al. teach the method described above, further comprising verifying that the calibration signal is a valid calibration signal, and avoiding the step of adapting if the signal is found to be valid (Fig. 6).

9. In regards to Claim 13, Manome et al. teach the method described above, and further modifying the duty cycle and amplitude parameters to verify the calibration signal (Column 2, lines 27 – 34 and 39 – 47), and verifying that the calibration signal includes characteristics indicative of the modification imparted to the initial calibration signal (Column 9, lines 43 – 49).

10. In regards to Claims 15 and 22, it is inherent that if a test device has multiple inputs than the testing method disclosed by Manome et al. will work for all of those inputs.

11. In regards to Claim 23, Manome et al. teach the method disclosed above, further comprising the steps of initiating a calibration sequence in response to an indicium of a user request to calibrate (Column 5, lines 31 – 35).

12. In regards to Claim 24, Manome et al. teach the method disclosed above, further comprising a cancel (stop) key (Fig. 10A, element 204).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 6, 14, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manome et al. in view of Welter (US-6,064,312).

15. In regards to Claims 6, 14, 18, and 21, Manome et al. teach the method disclosed above, wherein over-shoot or under-shoot is observed (Column 2, lines 39 – 47); however, they fail to teach displaying a value of at least one of an over-shoot or under-shoot associated with a calibration signal communicated by the probe. Manome et al. also fail to determine whether an error condition, due to physical defects in the probe, exists. Manome et al. also fails to disclose displaying the calibrated signal on a display device.

16. Weller teaches a method of calibrating a testing device, including a device for displaying the calibrated (verification) signal and its functional status (Column 10, lines 1 – 6), detecting an over-shoot or under-shoot associated with a calibration signal communicated by a probe, and

displaying a value associated with the error (histogram) (Column 6, lines 10 – 20). Weller teaches detecting an open ground lead, open signal lead, shorted probe, and other physical defects in the probe, in addition to attenuation factor (Column 5, lines 15 – 19).

17. In regards to Claim 14, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention disclosed by Manome et al. by displaying a value associated with the over- or under-shooting of the calibration signal as taught by Weller, for the purpose of allowing the operator to compensate for the error by making adjustments to the testing device.

18. In regards to Claims 6 and 18, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention disclosed by Manome et al. by detecting physical errors and the attenuation factor in the probe as taught by Weller for the purpose of avoiding false readings that would occur in the case of physical errors or an inappropriate assumption of an attenuation factor of zero.

19. In regards to Claim 21, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention disclosed by Manome et al. by displaying the calibrated signal as taught by Weller for the purpose avoiding errors due to electrical defects inside the testing device by allowing the operator to manually verify that the signal has in fact been calibrated.

20. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manome et al. in view of Hoogendijk (US-5,180,973).

21. In regards to Claims 9 and 10, Manome et al. teach the method disclosed above, but they fail to teach a display device comprising and envelope within which a calibration signal is provided.

22. Hoogendijk teaches the method of providing a correctly calibrated signal to the display, and modifying the display and signal in a manner consistent with the calibration correction changes (Column 1, lines 45 – 53).

23. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method taught by Manome et al. by providing a correctly calibrated signal to the display device and making changes to the display and signal as taught by Hoogendijk for the purpose of verifying the proper operation of the testing device by allowing the operator to manually check the calibration.

24. Claims 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manome et al. in view of Nygaard et al. (US-6,463,392).

25. In regards to Claims 16, 17, and 19, Manome et al. teach the method disclosed above, further comprising the steps of initiating a calibration sequence in response to an indicium of a user request to calibrate (Column 5, lines 31 – 35); however, they fail to teach adapting a temporal offset parameter.

26. Nygaard et al. teach a device comprising a temporal offset parameter (Column 4, lines 55 – 67; Column 5, lines 43 – 55).

27. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention disclosed by Manome et al. by including the step of adjusting the temporal offset of the input signal for the purpose of calibrating the device signals to avoid false readings.

28. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manome et al.

29. In regards to Claim 25 and 26, Manome et al. teach an apparatus including a processor adapted to process data representative of at least one of the output signals (Fig. 1, element 28), a calibration signal generator (Column 1, lines 21 – 25), a memory for storing the operational parameters (Fig. 1, elements 37 and 38), and an oscilloscope (Column 1, lines 11 – 16). Manome et al. fail to teach having multiple inputs to the oscilloscope; however, it is well known in the art that many oscilloscopes have multiple inputs and one such oscilloscope would be applicable to the test method of Manome et al.

30. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Manome et al. by using a multiple input oscilloscope as is well to known to those of ordinary skill in the art for the purpose of being able to calibrate multiple probes, thus enabling multiple testing channels to decrease testing time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald M Lair whose telephone number is (703) 305-4450. The examiner can normally be reached on Monday - Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1436.

Donald M. Lair
Patent Examiner
Art Unit 2858
February 20, 2003

Christine Oda
Christine Oda
Primary Examiner